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WASHINGTON, DC 20001

EXAMINER

MUSSER, BARBARA J

ART UNIT PAPER NUMBER

1733

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/995,003

Applicant(s)

RAPAPORT, ZVI

Examiner

Barbara J. Musser

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy(U.S. Patent 5,083,361) in view of Lea et al.(U.S Patent 4,025,974), and Goodwin et al.(U.S. Patent 5,993,585).

Rudy et al. discloses forming a resilient fluid-filled bladder for use in a shoe by heating and bonding two sheets to the upper and lower surfaces of a core having two outer layers connected by connecting members. The sheets are then joined together to form a peripheral bond at the mid-point of the core.(Figure 2b; Col. 3, ll. 13-17; Col. 12, ll. 21-28; Col. 25, ll. 4-20) The reference does not disclose the specifics of the joining of the sheets, but simply states they are welded together.(Col. 12, ll. 21-24) Lea et al.(Figure 18) and Goodwin et al.(Figure 9A) disclose welding the peripheral edges of sheets surrounding a core in a mold. It would have been obvious to one of ordinary skill in the art at the time the invention was made to weld the peripheral edges together using a mold as this would insure proper positioning of the weld line.

Rudy et al. does not bond the sheets to the core at the same time as it forms the peripheral bond, but rather does it in two steps. Lea et al. discloses it is known in the

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bonding arts to join two sheets around a core by placing the sheets and core in a mold and welding the edges together while bonding the core to the sheets.(Col. 12, ll. 23-67; Col. 13, ll. 38-45) It would have been obvious to one of ordinary skill in the art at the time the invention was made to bond the core to the sheets at the same time the peripheral seam is formed as this is an obvious alternative to doing it separately while also reducing production time since Lea et al. discloses it is known in the bonding arts to bond the core the sheets at the same time the peripheral seam is formed.

The sheets are thermoplastic since Rudy et al. discloses the sheets can be made of the same material as the adhesive joining the core surfaces to the surfaces, and that is a thermoplastic.(Col. 10, ll. 5-6; Col. 26, ll. 34-36)

Regarding claim 2, Goodwin et al. discloses forming the bladder such that the weld coincides with the planar surface of one of the sheets.(Figure 8A) It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the bladder so that the weld coincides with the planar surface of one of the sheets since this locates the seam away from the area of maximum flexing of the sidewall, increasing durability.(Col. 4, ll. 61-64)

Regarding claims 4, 24, and 33, the mold is configured to form the sidewall.(Lea et al., Figure 19)

Regarding claims 5, 25, and 34, one in the art would appreciate that the bond would be re-configured as shown in Goodwin et al.(Figure 8A) when it is desired to form the bladder so that the weld coincides with the planar surface of one of the sheets since this mold structure allows such.

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Regarding claims 6-8 and 18-20, Rudy et al. discloses injecting gas into the space formed by the two sheets and the weld via an injection needle through an injection port.(Col. 12, ll. 59-63) The upper and lower surfaces of the core are held together by connecting members in a tensile configuration.(Col. 3, ll. 20-24)

Regarding claims 9, 21, and 31, one in the art would appreciate that the gas could be injected during bonding to press the sheets against the mold walls since applying pressure to form a sheet against a mold surface is well-known and conventional in the molding arts.

Regarding claims 10, 11, 22, 23, and 32, Goodwin et al. discloses it is known to use vacuum to pull a sheet against a mold surface so that it accurately conforms to the shape of the mold.(Col. 10, ll. 55-65) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use vacuum to pull the sheets against the mold surface so that they accurately conform to the shape of the mold.(Col. 10, ll. 55-65)

Regarding claims 13, 15, 17, and 27, Rudy et al. discloses applying a coupling material to the outer layers of the core to facilitate bonding.(Col. 24, ll. 53-65)

Regarding claims 14 and 28, while Rudy et al. heating the sheets at the same location that they are bonded to the core, one in the art would appreciate that the sheets could be pre-heated prior to placement in the mold to reduce the length of time in the mold particularly since it is well-known in the molding arts to preheat sheets prior to placement in the mold.

***Response to Arguments***

3. Applicant's arguments filed 9/9/03 have been fully considered but they are not persuasive.

Regarding applicant's argument that Lea et al. does not disclose a mold, applicant defines a mold as a cavity in which a substance is shaped. While Lea et al. does not describe the structure as a mold, it fits the definition of a mold in that the heated platens form a cavity and this cavity shapes the articles in it since the sheets of Lea et al. are flat prior to placement in the mold and shaped around a core afterwards. Applicant does not require more to the reshaping than can be inferred from the claims, namely that the layers are bent around the core and joined to each other to form a side seam.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

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where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Rudy et al. does not disclose how the peripheral seam is formed in a specific location. One in the art would look to other references to see how seams have been formed at specified locations. Goodwin et al. and Lea et al. both disclose a way of forming seams at the specified location is to use a mold so that the seam can be properly positioned. Rudy et al. also does not disclose joining the layers together at the same time the seam is formed, the seam formation shaping the sidewall. The reference suggests a two step process. Lea et al. discloses it is known in the bonding arts to join layers together at the same time a seam which forms the sidewalls is formed. One in the art would appreciate that a one step process is an obvious alternative to a two step process and that a one step process would reduce production time and would use it for that reason.

Regarding applicant's argument that Goodwin et al. does not disclose bonding the first and second sheets to the core at the same time a peripheral seam is formed, examiner agrees.

### **Conclusion**

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Barbara J. Musser** whose telephone number is **(703)-305-1352** until December 20 when it changes to (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*BJM*

BJM

  
JEFF H. ARTER  
PRIMARY EXAMINER  
GROUP 1300